



Seagate® Business Storage NAS

Reseller Reference Guide

Business-Grade Storage for Today's Growing SMB

The Seagate line of rackmount Business Storage NAS is a family of networked storage devices that make it fast and easy for small and medium businesses to centralise and access their data storage while automating the protection and recovery of their valuable data. These newest Business Storage NAS models are ideal for business customers looking for simple, high-performance, high-capacity, reliable and affordable data storage solutions.

Business Storage NAS now comes in 4-bay and 8-bay models incorporating a rackmounted design, each containing business-class hardware, unified storage with NAS and iSCSI SAN support, and simple private cloud access. Designed and manufactured by Seagate, Business Storage NAS comes with a 3-year limited warranty and dedicated technical support to ensure complete confidence for your customers.

Key Features and Benefits

Centralised Network Storage

Lets your customers centralise their storage, allowing all the computers in their businesses to access, collaborate and share files.

Backup PCs and Macs

Your customers can back up all their PC and Macs to a single, centralised location. Select models are Time Machine software compatible.

Private Cloud

Offers your customers their own secure and private cloud, enabling them to share files with colleagues and clients around the world using PC, Mac, mobile phones and tablets.

Key Features and Benefits (continued)

Hot-Swappable Drives and More

Gives your customers the freedom to upgrade their storage capacity or replace a drive without any downtime, thanks to the hot-swappable, cable-free drive bays. The 8-bay model also features hot-swappable cooling fans and dual redundant power supplies with increased reliability.

Power Management

The system is designed with wake-on-LAN (WOL), power-saving mode and smart cooling to help ensure efficient use of power and optimised performance.

Built for Growing Businesses

Powered by the Seagate NAS OS 3 and dual-core Intel processors, the new business NAS delivers up to 3x performance and 2x capacity compared to other NAS products.

SimplyRAID™

SimplyRAID functionality automatically manages installed drives to give your customers the best blend of capacity and redundancy.

Cloud Backup

Business Storage NAS rackmount models are equipped with the Wuala geo-distributed cloud storage service for seamless and encrypted offsite backup.

iSCSI SAN

In addition to NAS file service, Business Storage NAS also has built-in iSCSI support for various business needs, including shared storage of the virtualisation environments of small businesses.

NAS-Optimised Drives

Following through on the promise of higher performance, Business Storage rackmount NAS models are equipped with HDDs fine-tuned for today's business applications. The 4-bay rackmount model offers configurations with NAS HDDs for improved reliability and performance. The 8-bay rackmount model comes pre-populated with Seagate enterprise drives for even more demanding business needs.

Why Sell Business Storage?

- **Open up new market opportunities:** While PC spending is declining, SMB spending on peripherals is expected to experience strong growth. Seagate provides the technology and support to help channel partners address this growing market of customers requiring fast and easy ways to deploy centralised/secondary/remote/backup storage.
- **Differentiate your offerings:** Add Business Storage NAS to complement your existing IT solutions and services. Increase value-add by using Business Storage NAS to create a more complete portfolio and position yourself as an all-in-one solutions provider.
- **Compelling features for SMB customers:** The product delivers a simple solution for storage expansion, backup and recovery needs; is easy to configure out-of-the-box (even for Macs); and requires minimal maintenance, especially for customers with no dedicated IT support.
- **Meet growing business needs:** Business Storage NAS can meet the needs of SMBs as they grow their IT infrastructure to include multiple locations, as well as virtual servers. Rackmounted Business Storage NAS models offer iSCSI protocol support, allowing customers to connect to Business Storage NAS as a local drive, even if the physical devices are in different locations.

Why Seagate?

- The Business Storage 8-bay Rackmount NAS is a first of its kind, supporting **8x 3.5-inch hot-swappable drives in a single 1U rack**, for double the capacity in half the space.
- The Business Storage 4-bay Rackmount NAS **includes Seagate NAS HDD drives** (except diskless model) optimised for increased performance and reliability.
- **Business Storage NAS products and drives are designed by Seagate to work seamlessly together**, and are supported entirely by Seagate.
- The fact that **Seagate has been a technology and reliability leader for over 30 years** gives your customers the confidence that their data is safe.
- Business Storage NAS comes with a **higher level of email and phone support for you and your customers**, so support issues are handled by in-house Seagate staff specifically trained in networking and NAS.

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Target Audience Qualifying Questions for Business Storage 4-Bay Rackmount NAS

Ideal for: Small business, small office/home office (SOHO) - up to 100 users

Sales play: "The perfect solution for my clients wanting more control and ownership of data vs. a cloud-only offering."

| Qualifying Questions | Reseller Talking Points |
|---|---|
| Do you support a main office location that uses a server rack for the office network? | Why Ask: The 4-bay rackmount model is designed for businesses who have centralised their networking system into a rack to conserve space. |
| Are you able to easily share work documents among your team, even when outside the office? Do you face challenges storing work documents produced by your employees? How do you retain the data once an employee leaves the organisation? | Why Ask: Business Storage NAS improves collaboration and knowledge sharing as it allows files to be shared among team members over the network, and even online. |
| How do you ensure that all the laptops and desktops in your organisation are backed up regularly? Are you able to schedule it automatically? | Why Ask: Data on every team member's machine will also be automatically backed up to prevent loss of important files. |
| Are you interested in a solution that is easy to configure for your customers? | Why Ask: SimplyRAID™ automatically manages installed drives to give your customers the best blend of capacity and redundancy. |
| Are you interested in having the ability of offsite cloud storage as a backup to what you would have on-premise? | Why Ask: The 4-bay rackmount model is equipped with the Wuala® secure cloud storage service including a three month free trial with 100GB of storage for secure offsite backup. |

FACT

The #1 factor discouraging cloud adoption for small and medium-sized businesses is concern about data security.¹

Cool Factor

The 8-bay Rackmount NAS is equipped with redundant power supplies, tool-less hot-swappable drive bays and fans, and dual Gigabit Ethernet connections to keep your business up and running even if you are changing out components.



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Offer Your Clients the Right Seagate® Business Storage Rackmount NAS Unit



| | 4-Bay Rackmount NAS | 8-Bay Rackmount NAS |
|--------------------------------------|---|---|
| Approximate Number of Users | 100 | 250 |
| Ideal Customer Environment | SOHO/SMB: dental, legal, insurance, car dealership, medical clinic, creative services agency, remote office/branch office | SOHO/SMB: dental, legal, insurance, medical clinic, creative services agency, remote office/branch office |
| Best-Fit Usage, Offices Looking for: | <ul style="list-style-type: none"> High storage availability and minimal downtime Easy integration with existing server rack for their office network Operation with always-on, higher workloads, frequent use by multiple users iSCSI for virtualised environments Offices with dedicated IT staff looking for easy management of installed drives Monitoring and control of the server from anywhere in the world with a secure web interface | <ul style="list-style-type: none"> Easy integration with existing server rack for their office network Operation with always-on, higher workloads, frequent use by multiple users iSCSI for virtualised environments Offices with dedicated IT staff looking for easy management of installed drives Small hardware footprint for high density and high capacity Business with higher SLAs needing enterprise-class hardware and redundancy ensuring the least amount of downtime |
| Capacity ¹ | 0TB (diskless), 4TB, 8TB, 12TB, 16TB | 8TB, 12TB, 16TB, 24TB, 32TB |
| Internal Drive Class | Seagate NAS HDD | Seagate Constellation® ES.3 |
| Mac and Time Machine Compatible | Yes | Yes |
| File Transfer Performance | Up to 200MB/s | Up to 200MB/s |
| Operating System | Seagate NAS OS 3 | Seagate NAS OS 3 |
| Processor | Intel® Dual-Core 2.13GHz Atom™ Processor | Intel Dual-Core 2.3GHz Ivy Bridge Processor |
| Memory (RAM) | 2 GB | 4GB Error-Correcting Code (ECC) |
| Gigabit Ethernet (LAN) Ports | 2 | 2 |
| Network Client Platform | Windows® XP/Vista®/Windows 7/8, Windows Server 2003/R2, 2008/R2, 2012, Mac OS® X, Linux, UNIX | Windows XP/Vista/Windows 7/8, Windows Server 2003/R2, 2008/R2, 2012, Mac OS X, Linux, UNIX |
| RAID Recovery | Yes | Yes |
| JBOD | Yes | Yes |
| Remote Access | Yes, plus mobile device apps | Yes, plus mobile device apps |
| Off-Site Backup | Yes, via secure cloud storage | Yes, via secure cloud storage |

Seize the Opportunity

According to a recent Spiceworks.com survey of small businesses:²

- SMBs with fewer than 250 employees are seeing the biggest budget increases (up US\$30,000 from the second half of 2012)
- The bulk of the increased budget is going to new end-user hardware purchases
- 31% of SMB respondents state that their data is growing 25%-49% per year³

² Spiceworks.com, State of SMB IT 1H2013. www.spiceworks.com/marketing/resources

³ Spiceworks.com, Voice of IT: How SMBs are Backing Up: Solutions, Trends & Challenges March 2013 www.spiceworks.com/marketing/resources

Seagate® Business Storage NAS



| | 4-Bay Rackmount NAS | | 8-Bay Rackmount NAS | |
|------------------|---|---------------------|--|---------------------|
| | Capacity ¹ | Model Number | Capacity ¹ | Model Number |
| Model Numbers | 0TB (diskless) | (AMER) STDN100 | 8TB (4x2TB) | (AMER) STDP8000100 |
| | | (EMEA) STDN200 | | (EMEA) STDP8000200 |
| | | (APAC) STDN300 | | (APAC) STDP8000301 |
| | 4TB (2x2TB) | (AMER) STDN4000100 | 12TB (4x3TB) | (AMER) STDP12000100 |
| | | (EMEA) STDN4000200 | | (EMEA) STDP12000200 |
| | | (APAC) STDN4000300 | | (APAC) STDP12000301 |
| | 8TB (4x2TB) | (AMER) STDN8000100 | 16TB (4x4TB) | (AMER) STDP16000100 |
| | | (EMEA) STDN8000200 | | (EMEA) STDP16000200 |
| | | (APAC) STDN8000300 | | (APAC) STDP16000301 |
| | 12TB (4x3TB) | (AMER) STDN12000100 | 24TB (8x3TB) | (AMER) STDP24000100 |
| | | (EMEA) STDN12000200 | | (EMEA) STDP24000200 |
| | | (APAC) STDN12000300 | | (APAC) STDP24000300 |
| | 16TB (4x4TB) | (AMER) STDN16000100 | 32TB (8x4TB) | (AMER) STDP32000100 |
| | | (EMEA) STDN16000200 | | (EMEA) STDP32000200 |
| | | (APAC) STDN16000300 | | (APAC) STDP32000300 |
| Inside The Box | Seagate Business Storage 4-bay Rackmount NAS, Ethernet cable, Power cord, Quick start guide, USB key with system recovery software, Seagate Network Assistant, Internet links to documentation, 3-month trial for Wuala secure cloud backup | | Seagate Business Storage 8-bay Rackmount NAS, Ethernet cable, 2x power cords for redundant power supply, Slide rails for rack mounting, Hard disk drives mounted on their trays, Quick start guide, USB key with system recovery software, Seagate Network Assistant, Internet links to documentation, Cable management arm, 3-month trial for Wuala secure cloud backup | |
| Limited Warranty | 3 years | | 3 years | |

¹ When referring to drive capacity, one terabyte, or TB, equals one trillion bytes



What Is Wuala?

Both Seagate rackmount Business Storage NAS products integrate

Wuala cloud backup service with two major benefits:

- Anywhere access to files securely with free business-focused apps for PC, Mac, smartphone and tablets.
- Simple and secure off-site backup. For best-in-class security, data is encrypted before leaving the NAS and only the user retains the encryption key. NOTE: This service is provided as a three-month free trial for up to 100GB of storage.

Under The Hood - NAS-Optimised Hard Drives

Typical NAS solutions with four bays and fewer traditionally leverage desktop HDDs to hit lower price points. While appropriate for some SOHO applications, Seagate understands the need for higher performance for larger offices with more users. This is why we've included step-up drives in the rackmount NAS models:

- Business Storage 4-bay Rackmount NAS: **Seagate NAS HDD** with NASWorks™ software that is fine-tuned to address the needs of small NAS systems, improving reliability and offering numerous benefits
- Business Storage 8-bay Rackmount NAS: Preinstalled with **Seagate Enterprise Capacity 3.5 HDDs** (Constellation® ES.3), delivering a higher level of enterprise performance and reliability for your larger clients.



NAS HDD



Enterprise Capacity
3.5 HDD

For more information on Seagate NAS-optimised drives, visit www.seagate.com/internal-hard-drives/nas-drives/

Seagate® Business Storage NAS



Training

Want to know more? Seagate has put together a few training modules for you when you're looking for product overviews, deep-dive technical walk throughs, and installation tips and tricks.

Get access to these resources and more from the Seagate Partner Portal: www.seagate.com/partner

Product Resources

Seagate Partner Program
www.seagate.com/partners

Seagate Brand Portal
<https://branding.seagate.com>

Seagate Network-Attached Storage
www.seagate.com/external-hard-drives/network-storage

Ask Seagate YouTube Site
<http://www.youtube.com/user/AskSeagate?feature=watch>

Seagate Support
<http://www.seagate.com/about/contact-us/>

Technical Phone Support

A full list of support information is at www.seagate.com.

| Country | Phone | Language | Business Hours |
|--|---|--|--|
| United States Canada Latin America Mexico | 1-800-SEAGATE (1-800-732-4283) 1-405-324-4700 | English French Portuguese Spanish | 8am – 6pm CT Monday – Friday |
| Brazil | 0-800-891-5814 | English French Portuguese Spanish | 9:00 – 18:00 Brazil (Rio) Hours Monday – Friday |
| United Kingdom | 0800 4732 4283 (Landline) | English | 07:00 – 10:30 12:00 – 16:00 Monday – Friday |
| Germany | 00-800-4732-4283 (Landline) | German | 08:00 – 11:30 13:00 – 17:00 Monday – Friday |
| France | 00-800-4732-4283 (Landline) | French | 08:00 – 11:30 13:00 – 17:00 Monday – Friday |
| Singapore | 800-110-1150 | English Mandarin Cantonese | 8:00am to 11:00am 12:30pm to 5:00pm Monday – Friday Singapore Standard Time (GMT 8) |
| China | 4008878790 | English Mandarin Cantonese | 8:00am to 11:00am 12:30pm to 5:00pm Monday – Friday China Standard Time (GMT 8) |
| Australia | 1-800-14-7201 | English | 10:00am to 1:00pm 2:30pm to 7:00pm Monday – Friday Australia Standard Time (GMT 10) |

Glossary of Key Terms

Access Level

Also known as permission level, the amount of access any person has to the Seagate NAS. Traditionally the NAS Manager application has two permission levels: *administrator* and *user*.

Administrator

A NAS administrator is responsible for the NAS server and all its settings. An administrator can set up or delete user accounts, group accounts, and shares; assign or remove access permissions; modify any setting on the server; and create other administrators.

AFP (Apple Filing Protocol)

A proprietary network protocol that offers file services for Mac OS X and original Mac OS.

Bandwidth

Bandwidth is throughput of data. Bandwidth is most often expressed in megabits per second.

CIFS (Common Internet File System)

A file system that lets people with different computers running Windows operating systems share files without having to install special software.

Cloud computing

Cloud computing is the term for scalable and accessible software services via the Internet.

Constellation® ES.3

Constellation ES.3 is an enterprise-class hard disk drive from Seagate. Designed to work in 24x7 bulk storage environments, this drive conforms to *nearline* reliability specifications, including a higher mean time between failures (MTBF) rate (1.4M hours @ 8,760 POH) and higher workload rate limits (550TB/yr average).

DHCP

DHCP, or Dynamic Host Configuration Protocol, is a network protocol used to configure devices that are connected to a network so they can communicate on that network using the Internet Protocol (IP).

Domain

A group of computers administered as a single unit from a central location.

Dynamic DNS (DDNS)

A way of maintaining the link between an unchanging domain name (for example, www.seagate.com) and a constantly changing IP address of a computer that uses DHCP instead of a static IP address. A DDNS service keeps track of changing IP addresses and forwards all network traffic for your domain name to whatever the current IP address is. You need to have a DNS service provider to customise this setting.

Ethernet (Ports)

Ethernet is a family of computer networking technologies for local area networks (LANs). It has largely replaced competing wired LAN technologies. Both the 4-bay and 8-bay Business Storage rackmount NAS models from Seagate feature two Ethernet ports, each with the capacity to handle up to 1Gb/s (gigabit per second) of data.

FTP (File Transfer Protocol)

A format for exchanging files over the Internet. FTP is commonly used to upload files to or download files from a server over the Internet.

Hibernation (Sleep mode)

Hibernation is the concept where a computer powers down in order to save power.

Hot-swap

To remove and replace a disk drive without first powering off the server.

HTTP (Hypertext Transfer Protocol)

Rules for exchanging the most common form of documents (hypertext documents) over the Internet.

HTTPS (Hypertext Transfer Protocol over Secure Socket Layer)

Rules for exchanging HTTP documents over encrypted connections.

IP address

The identifier of a computer, server, or other device on a TCP/IP network. IP addresses are a sequence of four numbers separated by periods (for example, 123.456.78.1). Every device on your local network has a unique IP address.

IP filters

The ability to allow or deny access to a Seagate NAS based on an IP address.

IPKG (Itsy Package Management System)

IPKG is a simple package management system for Linux OS that is designed for small embedded devices like a NAS.

iSCSI

In computing, iSCSI (Internet Small Computer System Interface) is an Internet Protocol (IP)-based storage networking standard for linking data storage facilities. iSCSI can be used to transmit block data over local area networks (LANs), wide area networks (WANs), or the Internet and can enable location-independent data storage and retrieval. iSCSI refers to a protocol while an *iSCSI target* refers to a storage server, such as a Seagate NAS device.

JBOD (Just a Bunch Of Disks/Drives)

JBOD is non-RAID drive configuration which is a collection of disks that are presented as one single disk.

Link aggregation

A method of increasing the speed of a device's network connection by using more than one Ethernet port simultaneously to connect to the network. If you connect both of your Seagate NAS LAN ports to your network router or switch, both connections can work simultaneously and in parallel to move data more quickly - similar to filling a bucket using two hoses instead of one.

MAC address

MAC (Media Access Control) address is a unique identifier that is assigned to a network device in order to communicate on a network. MAC addresses are used as a network address for most IEEE 802 network technologies, including Ethernet.

Mirror

A level of RAID protection also known as RAID 1. A mirror is built from two hard disk drives, where one drive is a mirror of the other (the same data is stored on each drive). Compared to independent hard disk drives, a mirrored volume provides faster performance, but has only 50% of the capacity.

NAS (Network-Attached Storage)

NAS is a file-level computer data storage connected to a computer network providing data access to a group of clients. Often manufactured as a computer appliance, NAS is a specialised computer built from the ground up for storing and serving files, rather than simply a general-purpose computer being used for the role.

NAS HDD

NAS HDD refers to a Seagate hard disk drive built and tested to provide enhanced performance for 24x7 NAS applications. The drive is distinguished by including Seagate NASWorks™ software, improving drive reliability with custom-built error recovery controls, power settings and vibration tolerances. This drive is an option for populated versions of the Seagate Business Storage 4-bay Rackmount NAS products.

NASWorks™

NASWorks technology refers to the suite of software and hardware enhancements Seagate includes on Seagate NAS HDDs. Benefits include extended error recovery controls for better data integrity, anti-vibration design for multi-drive solutions and advanced power profiles that tailor low power options for always-on NAS applications.

NAT (Network Address Translation)

NAT is the process of mapping a registered IP address to a nonregistered IP address (IP within a LAN).

NFS (Network File System)

NFS is a network file system protocol originally developed by Sun Microsystems, allowing users on the network to share files that are stored on different types of computers.

Rack Unit (1U, 2U)

A rack unit, U or RU is a unit of measure that describes the height of equipment designed to mount in a 19-inch rack or a 23-inch rack. The 19-inch (482.6mm) or 23-inch (584.2mm) dimension refers to the width of the equipment-mounting frame in the rack including the frame; the width of the equipment that can be mounted inside the rack is less. One rack unit is 1.75 inches (44.45mm) high. The size of a piece of rack-mounted equipment is frequently described as a number in *U*. For example, one rack unit is often referred to as *1U*, two rack units as *2U*, and so on.

RAID (Redundant Array of Independent Disks)

RAID is a hard drive technology that uses two or more hard disks in order to create a virtual storage. Data is distributed across the drives in one of several ways called *RAID levels*, depending on the level of redundancy and performance required.

SATA (Serial Advanced Technology Attachment)

SATA is a computer bus interface between bus adapters and optical drives or hard disk drives. SATA replaces the older AT Attachment standard (ATA later referred to as Parallel ATA or PATA), offering several advantages over the older interface, including native hot-swapping and faster data transfer. Current SATA revisions are 1.0, 2.0, 3.0, 3.1 and 3.2.

SimplyRAID™

Software that automatically manages installed hard disk drives to give the user an optimal blend of capacity and redundancy. Users also have the option to assign a specific RAID level if needed.

SSID (Service Set Identifier)

SSID is also known as the network name of a wireless network.

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SSL (Secured Socket Layer)

Also known as Transport Layer Security, SSL is a type of encryption used to protect data being sent over a network or the Internet. SSL uses a system of keys, like secret passwords, to send and receive files securely. You add SSL support to your Seagate NAS by entering an SSL certificate and key pair.

Thunderbolt™

Thunderbolt is an I/O technology that delivers extremely fast data transfer. Thunderbolt was developed by Intel.

UPnP (Universal Plug and Play)

UPnP is a collection of networking protocols that are used in network devices for media communication.

USB (Universal Serial Bus)

The interface between your computer and the USB devices you plug into it. Your computer communicates with USB devices through the USB interface.

WOL (wake-on-LAN)

An Ethernet computer networking standard that allows a NAS to be turned on or woken up remotely by a network message. The message is usually sent by a program executed on a computer connected to the same local area network. When you suspend WOL your NAS is turned off, however, the network interface card remains active and listening for a special network message. When the network interface card receives a WOL magic packet message, the NAS will automatically turn on.

Web access protocol

The rules for sending information over the Internet. Your Seagate NAS has two Web access protocol choices, HTTP and HTTPS.

WebDAV (Web Distributed Authoring and Versioning)

An extension of the Hypertext Transfer Protocol (HTTP) that facilitates collaboration between users in editing and managing documents and files stored on World Wide Web servers.

WLAN (Wireless LAN)

WLAN is a LAN that is distributed wireless.

Wuala®

A secure cloud storage service allowing computer files to be stored securely online, shared with other users and accessed anywhere there is an Internet connection. As a feature included in both the Seagate Business Storage Rackmount NAS products, the service can be used to set up automatic backups of local data, or used to synchronise whole folders to the cloud. All data is encrypted locally before it is uploaded and, during the upload, it is split up into many different pieces and stored in multiple places ensuring no files are lost. More information at www.wuala.com.

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